



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,297	03/15/2005	Gerald Rafler	11057US	2162
30008	7590	09/28/2006	EXAMINER	
GUDRUN E. HUCKETT DRAUDT			ZEMEL, IRINA SOPHIA	
LONSSTR. 53			ART UNIT	
WUPPERTAL, 42289			PAPER NUMBER	
GERMANY			1711	

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/511,297

Applicant(s)

RAFLER ET AL.

Examiner

Irina S. Zemel

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7-14-2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 24 and 35 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. While the base claims 23 and 35 claim various phosphinic acids, the claims dependent on those claims, i.e., claims 24 and 36 specific esters and referred to it and "the esters". There is no sufficient antecedent basis in claims 23 and 35 for "the esters" of claims 24 and 36. Also, note that claim 35 is missing a comma after "dialkyl phosphinic acids".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16-28 and 30-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGP 2002/0052462 to Masuda et al., (hereinafter "Masuda").

The Masuda reference discloses a method for producing polyesters from monomers by reacting the monomers in the presence of tin catalyst and a co-catalyst. As the tin catalyst, the compounds fully corresponding to the claimed compounds are

expressly disclosed in, for example, [0065]. The reference further lists various suitable titanium and zirconium compounds for use as catalysts and further expressly states that combination of various listed catalysts is suitable for the disclosed polyesterification reaction. See, for example, [0066]. As the co-catalysts, various aliphatic and aromatic phosphinic acids are expressly disclosed as B-1 co-catalyst in, for example, [0068-70]. Note, that while some claims recite phosphinic acid derivatives, none of the claims is limited to such derivatives and all of the claims are still met by a phosphinic acid. The reference further expressly discloses that initial monomers can be cyclic monomers such as known cyclic lactide diesters that correspond to the claimed cyclic monomers. See, for example, [0038-40]. The reference further expressly discloses that the co-catalyst, i.e., phosphinic acid may be added to the polymerization reaction at the beginning of the reaction or at the later stage of the reaction when oligomers of desired molecular weight are obtained (or when the polymers are inherently in molten state). See, for example, [0086]. The invention as claimed, thus, is fully within the purview of the Masuda reference, and choice of specifically claimed compounds from the lists of expressly disclosed compounds (such as monomers and catalysts) would have been clearly within the skills of an ordinary artisan absent showing of unexpected results that can be clearly attributed to such choice of components.

Claim 29 rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda in combination with Ohara '682 (or record).

The disclosure of Masuda is discussed above. The reference does not expressly address the production parameters such as choice of reaction vessel. However, it is

Art Unit: 1711

well known in the art to polymerize lactides on commercial stage in an extruder, as for example, supported by Ohara. Thus, it would have been obvious to conduct the process disclosed in Masuda in an extruder (with addition of B-1 component on the second or later stage upstream of feeding the other components) when the polymer is produced on a commercial scale.

Response to Arguments

Applicant's arguments with respect to claims 16-38 have been considered but are moot in view of the new ground(s) of rejection.

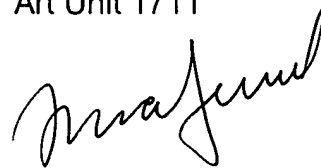
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irina S. Zemel whose telephone number is (571)272-0577. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571)272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1711

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Irina S. Zemel
Primary Examiner
Art Unit 1711



ISZ